REVISED 2001 HUMAN BEHAVIOR COURSE FINAL EXAMINATION
ANSWERS AFTER CHALLENGES
(ALTERATIONS FROM ORIGINAL IN BOLD)

I apologize for the many answer key errors and for a few ill-conceived questions that found their way onto this examination. I hope that my careful response to these challenges will clarify some of the answers and correct errors where they occurred. Looks like I had a 'bad hair day' on this examination.

You all were a great group, and I look forward to seeing you in the years and months ahead. Whether or not you liked the course, give psychiatry careful consideration as a career choice. You won't be sorry. It affords tremendous opportunities and requires many modes of thinking.

Best,
LTC Chuck Engel

1. C (NOT B)
2. D
3. A
4. C
5. E
6. D
7. A
8. B
9. B OR C
10. C
11. C
12. C
13. C
14. A, B, OR D
15. B
16. E
17. B
18. E
19. B (NOT C)
20. A (NOT B)
21. E
22. A
23. C
24. A (NOT B)
25. C
26. A, B, C, D, OR E
27. E
28. B
29. D
30. E
31. B
32. E
33. B
34. E
35. E
36. D
37. C
38. A
39. C
40. B
41. D
42. C
43. E
44. D
45. A (NOT E)
46. A OR D
47. B
48. A
49. C
50. A OR C
51. A
52. D
53. A
54. B
55. C
56. B
57. B
58. B
59. B
60. D
61. D
62. B
63. A
64. D
65. A, B, C, D, OR E
66. A
67. A
68. A, B, C, D, OR E
69. C
70. C
71. D
72. E

!! ANSWER KEY !!

HUMAN BEHAVIOR COURSE FINAL EXAM CHALLENGES

24 QUESTIONS CHALLENGED
60 TOTAL CHALLENGES
12 CHANGES MADE TO QUESTION ANSWERS

Question 1.
Question and Answer Key Answer.
A 55-year-old man with a long history of alcohol dependence was admitted to the medical ward. At the time of admission, he was noted to have alcohol on his breath. Two days after admission he became acutely agitated and reported hearing other patients calling him a homosexual. He appeared to be alert and well oriented and his vital signs were normal. The patient was probably exhibiting symptoms of

A. Schizophrenia
B. Delirium tremens
C. **XX** Alcohol-induced psychotic disorder, with hallucinations
D. Pathological intoxication (idiosyncratic alcohol intoxication)
E. Methanol intoxication

Challenges.

1. The answer in the key states B (delirium tremens) is correct. I chose “C” as the correct answer due to the following reasons. Page 378 in the text states that DT’s are associated with confusion, perceptual disturbances, etc, along with the *usual withdrawal symptoms*. The usual withdrawal symptoms (p. 377) consist of autonomic hyperactivity, including a pulse over 100 b.p.m, increased blood pressure, sweating, malaise, etc. In the question, our patient was alert, oriented, with *normal vital signs*. I cannot see how the pt. in the question had DTs in the condition he was described. Alcohol Hallucinosis (answer C; a subset diagnosis under alcohol-induced psychosis) on p. 378 sure sounds more like our pt. Alcohol Hallucinosis is described as having auditory hallucinations, clear sensorium, and less autonomic symptoms than DTs. True, it has not been > than 1 week, but the question does not preclude this answer. I feel answer C is the most correct answer.
2. The exam key states, "B. Delirium tremens" as the correct answer.
   I would like to challenge and state that, "C. Alcohol-induced psychotic disorder, with halluncinations" is the correct answer.
   SUPPORT TO DISCOUNT EXAM KEY: p378 (heading "Alcohol Withdrawal Delirium") from the course textbook states, "...(DTs) characterized by confusion, disorientation, fluctuating or clouded consciousness, and perceptual disturbances, in addition to the usual withdrawal symptoms." [[[NOTE: Usual withdrawal symptoms from preceding page, under "Alcohol Withdrawal" include, "...autonomic hyperactivity, including increased blood pressure, pulse rate greater than 100, sweating, malaise, nausea, vomiting, anxiety, tactile illusions or hallucinations, and disturbed sleep.]]]. Further, it states, "Patients frequently report visual hallucinations..."
   SUPPORT FOR MY ANSWER: p378 (heading "Alcohol-Induced Psychotic Disorders") from the course textbooks states, "Alcohol hallucinosis is associated with vivid auditory hallucinations lasting at least 1 week and occurring shortly after the cessation or reduction of heavy ingestion of alcohol. The hallucinosis can develop in a clear sensorium with a lower amount of autonomic symptoms than is typical in

DTs. The hallucinations may include familiar noises or clear voices, which may be responded to with fear, anxiety, and agitation. The diagnosis is usually based on heavy alcohol use, lack of formal thought disorder, and lack of schizophrenia or mania in past or family history."

NOTE: In the vignette, the patient is stated to have a long history of alcohol dependence, to be acutely agitated, reported auditory hallucinations. Further, he was alert and well-oriented and his vital signs were normal. Everything in this vignette points to alcoholic hallucinosis rather than DTs. The patient has a clear sensorium, has auditory hallucinations, and normal vital signs. The only single line that is in minor discord is that a diagnosis of alcoholic hallucinosis requires at least one week of symptoms; HOWEVER, the question asks what was the patient probably exhibiting symptoms of...not what is the diagnosis. Please review this question & answer.

3. The correct answer should be Answer Choice B. According to the definition of delirium tremens in the textbook one of the symptoms is fever, the patient described in the question does not have a fever, thus does not have delirium tremens. In addition, DT has symptoms of confusion, disorientation, visual halluciinations, and fluctuating or clouded consciousness —the patient in this question has none of these symptoms. The patient has the symptoms of alcohol-induced psychotic disorder(Answer choice B)—auditory hallucinations and clear sensorium.
4. There is no correct answer. Delirium tremens cannot be the answer, as the question talks about the vital signs being normal. During DT, there is fever and can be tachycardia and tachypnea. That would remove B as an answer. We learned earlier in the year that alcohol induced psychotic disorder contains auditory hallucinations. That would make C the best possible answer remaining. If you say that it is wrong, then there is no correct answer.
5. Answer choice C, alcohol-induced psychotic disorder with hallucinations, is an equal if not better choice than B, delirium tremens. According to the text on p.378, de lirium tremens is marked by confusion, disorientation, and clouded consciousness in addition to normal alcohol withdrawal symptoms. Alcohol-induced psychotic disorder has an onset within 48 hours, clear sensorium, and vivid auditory hallucinations. This definition more accurately fits the man in the question – onset two days after admission, alert and well-oriented, auditory hallucinations.
6. ALCOHOLIC HALLUCINOSIS: A 50-year-old business executive becomes agitated upon his admission to an orthopedic ward with a fractured femur; he complains that people are making derogatory comments about him and are accusing him of impotence. On persistent questioning, he admits to moderate alcohol intake. There is no personal, past, or family history suggestive of any major psychiatric illness. PE: Psychomotor agitation; anxious and slightly tremulous but well oriented; remainder of neurologic, funduscopoic, and systemic exam normal.

   Clearly question #1 on the final exam is comparable to Case 41, alcoholic hallucinosis. Possibly there is an error with the answer key. If there is some subtle distinction that I am unaware of, please explain the dissimilarity.
7. Answer key shows B. Delirium tremens, ANSWER should be C. Alcohol-induced psychotic disorder, with hallucinations. I found this reference while studying for the USMLE. REFERENCE: Underground clinical vignettes, cases 20 DTS, 41Alcoholic hallucinosis.
8. * ref p. 378

   The patient in the question, a known alcoholic, is alert and well-oriented and has symptoms of agitation and auditory hallucinations occurring approximately 2 days

after his last alcohol ingestion. He has no symptoms of confusion, disorientation, insomnia, or mild fever (all part of DT).

Alcohol-induced psychotic disorder (alcohol hallucinosis) is associated with vivid auditory hallucinations occurring shortly after the cessation of heavy ingestion of alcohol. The hallucinosis can develop in a clear sensorium, and can include clear voices, which may be responded to with agitation. The patient is clearly exhibiting symptoms of alcohol-induced psychotic disorder.

Dr. Engel Response. Correct answer is C. There was a discrepancy between the answer key and the answer I listed on the answer key examination.

Question 7.

Question and Answer Key Answer.

Which of the following antipsychotic drugs is LEAST likely to cause tardive dykinesia?

A. **XX** Clozapine
B. Haloperidol
C. Olanzapine
D. Risperidone
E. Sertindole

Challenges.

1. More than one correct answer. A, C and D should be correct since all three atypical antipsychotics do not cause tardive dyskinesia, in fact, the book states on page 1065, that other AAPs not Clozapine should be used as first line therapy.

Dr. Engel Response. Correct answer is **A**. The question asks which drug is least likely to cause TD, not which drug is indicated. Clozapine has other side effects (1-2% risk of fatal agranulocytosis, see page 1075, and seizures, see page 1077). Under the heading "Tardive Disorders" on page 1069 the book states, "Clozapine seems to carry little or no risk of inducing TD…Preliminary evidence suggests a level of risk for Olanzapine between the conventional antipsychotics and clozapine." On page 1077, the book states that the risk of TD for resperidone "appears to be higher than for clozapine and lower than for conventional antipsychotic drugs." Sertindole is a brand new atypical and no one knows much its relationship to TD. The single best answer is therefore response A.

Question 9.

Question and Answer Key Answer.

Features associated with anorexia nervosa include

A. Normal hair structure and distribution
B. 7 to 9% of those affected are male
C. **XX** Onset between the ages of 10 and 30
D. Mortality rates of 20-25%
E. All of the above

Challenges.

1. I think answer B should be considered correct also because of the variations in stats

given in the textbook (top of p. 987). One study in 1980 states that 0.2% of females have anorexia and 0.02% of males have it. Therefore 10% of patients with anorexia are male. The other listed stat was from a study in 1974 which states that 4-6% of the anorectic population are males. I think the key point, which the studies support, is that less than 10% of anorexics are males. The actual percentage is irrelevant (and studies can't confirm an actual numerical value anyway). What is important is that very, very few men have anorexia compared to women.

2. Answer B is the best available answer...none of them are really good. I don't even know how to begin with this question...except that the answer provided (AN onset is between the ages of 10 and 30) is simply wrong. First of all, there is not an age of onset described in the DSM-IV. Furthermore, cases of anorexia nervosa have been documented as young as 7yrs old and, although I haven't paid attention to those over 30...it is easily explained. Consider a female who is recently divorced and back in the dating game. She may feels that her body can't compete with others (especially if she was left for a young "thin" female). Consider an actress/model that is over 30 and beginning to lose jobs to the "younger, thinner" females. These are certainly examples of precipitating factors that can occur at a later age. (I know I haven't documented this here...but I can provide a lot of documentation...thanks to my OAR) The best answer that I could choose was B. It's close to the figure stated in the red book (which I believe is 4-6%)...and in the beauty (of lack of beauty) of stats...the ranges vary so much from study to study...if one book says 4-6...another will say 7-9...and another will say 2-4....

Dr. Engel Response. Correct answers are **B or C**. Data provided in the book (top of page 987 suggest that the proportion of males with anorexia nervosa could range between ~10% (0.02% prevalence among males versus 0.2% among females) and 4-6%. Therefore, I'll accept 7-9% as a correct response. The best estimate of mortality according to the book is 6.6% at 10-year follow-up and 18% at 30-year follow-up. Therefore response D is incorrect (too high). Epidemiological data provided in the book strongly suggest the problem is greatest between ages 10-30, making choice C (in my initial view) the single best answer (there are people start the disorder earlier or later, of course, but the overwhelming majority of affected individuals fall within that age group). Hair changes associated with anorexia nervosa (slide 20 page 561) include increased lanugo, so choice A is incorrect.

Question 13.

Question and Answer Key Answer.

Over the past three months, the woman in the question above has experienced early morning awakening and loss of appetite. She has lost 12 pounds, which she attributes to the effects of cancer. She is unable to find even momentary pleasure in anything and has been unable to do her housework. She thinks her family would be better off without her. She has a sad, mask-like facial expression. Her speech is monotonous and slow. Her sentences often begin after long, sighing expirations. Tears come to her eyes when she begins to talk about the fact that her youngest child left for college three months ago.

Previously she had been well. She denies a previous history of similar symptoms and has received no prior medical or psychiatric help. Although regarded by

others as unduly serious, formal, and perfectionistic, she takes pride in the way she is: "I guess I was a 'workaholic,' but that's the way I am."

The most appropriate pharmacotherapy would be

A. Desipramine.
B. Haloperidol.
C. **XX** Desipramine and haloperidol.
D. Desipramine and diazepam.
E. Haloperidol and diazepam.

Challenges.

1. This woman shows no signs of psychosis, and I am not sure what the parenthetical statement is trying to relay to us in answer choice C. As the question presently states, an anti-depressant, answer choice A, would be the only choice of medication. If the intention was to "trump up" the psychosis in the vignette, then the question should have been written differently.

Dr. Engel Response. Correct answer is **C**. The patient has a fixed false belief about her body (i.e., a somatic delusion) that persists in spite of multiple reassurances and extensive medical testing. The presence of a delusion constitutes psychosis. Therefore, the co-administration of an antipsychotic and an antidepressant (because of the presence of marked vegetative signs and symptoms) is most appropriate.

Question 14.

Question and Answer Key Answer.

All of the following statements are true about bipolar I disorder EXCEPT

A. Bipolar I disorder most often starts with depression
B. About 10 to 20 percent of patients experience only manic episodes
C. An untreated manic episode lasts about 3 months
D. **XX** As the illness progresses, the amount of time between episodes often increases
E. Rapid cycling is much more common in women than men

Challenges.

1. Our text offers no information regarding the length manic episodes except to say it must be present for one week or require hospitalization to be considered a manic episode. This question requires info we do not have and should be thrown out.

Dr. Engel Response. Correct answer is **A, B, or D**. On page 526 the book notes "cycle length shortens during the first 3-6 episodes [of bipolar I disorder] and then stabilizes at 1-2 episodes per year…" making item D false. The same page also states the mean duration of a manic episode is 5-10 weeks. This figure includes both treated and untreated episodes, providing support for item C. Page 495 of the book notes that rapid cycling (four or more episodes of depression and/or mania or hypomania per year) occurs more frequently among women and in bipolar II disorder, making item E true. Page 246 states "in virtually all cases [of bipolar I disorder] such an [major depressive] episode eventually develops" so I'll also accept answer B as a correct response. Though response A is a commonly accepted "fact" there is no mention of it in the lecture or the book, so I'll allow that as a correct response also.

!! ANSWER KEY !!

Question 19.

Question and Answer Key Answer.

Common side effects of buspirone include

A. Sedation and rash.
B. **XX** Nausea and dizziness.
C. Ataxia and tremor.
D. Renal impairment and diabetes insipidus.
E. All of the above.

Challenges.

1. The correct answer should be B: Nausea and Dizziness. On Page 1058 of the textbook, the side effects of buspirone are listed as nausea, insomnia, dizziness, and lightheadedness. No where does it mention ataxia and tremor in connection with buspirone.
2. The exam key states, "C. Ataxia and tremor" as the correct answer.
   I would like to challenge and state that "B. Nausea and dizziness" is the correct answer.
   SUPPORT: p1058 (1st paragraph under "Side Effects"; line 1) from the course textbook states, "The side effects that are more common with buspirone than with the benzodiazepines are nausea, headache, nervousness, insomnia, dizziness, and lightheadedness."
   Note: There is neither a mention of ataxia nor tremor as common, or uncommon, side effects.
3. The correct answer should be Answer Choice B. According to the textbook the side effects associated with Buspirone are NAUSEA, headache, nervousness, insomnia, DIZZINESS, and lightheadedness. There is no mention of ataxia or tremor, on the contrary the text states that buspirone is not sedating and does not impair mechanical performance
4. The correct answer is B (nausea and dizziness) I will refer you to Study Question #7 in the Psychopharmacology and ECT section. It is the same question as on the exam. The answer can be found on page 1058 of the text. Dizziness and nausea are both mentioned as possible side-effects. Ataxia and tremor are no where to found. The correct answer is B.
5. According to the text on p. 1058, side effects associated with buspirone include: NAUSEA, headache, nervousness, insomnia, DIZZINESS, and lightheadedness. It does not mention anything about ataxia or tremors, therefore, answer choice B should be the correct response.
6. Text page 1058 states common side effects of buspirone include nausea and dizziness. B should be the correct answer.
7. Key states that “C” is correct. I feel that “B” is correct. Page 1058 of our text clearly states that common side effects of buspirone include nausea and dizziness.
8. ANSWER should be B. Nausea and dizziness. Reference. Textbook of Psychiatry 3rd Edition page 1058. "The side effects that are more common with buspirone than with the benzodiazepines are nausea, headache, nervousness, insomnia, dizziness and lightheadedness."
9. * ref p. 1058
   Under the section titled, "Side Effects," the book states, "the side effects that are

more common with buspirone that with the benzodiazepines are nausea, headache, nervousness, insomnia, dizziness, and lightheadedness." Ataxia and tremor are not mentioned.

Dr. Engel Response. Correct answer is **B**. Sorry. The answer key has a typo and is different from the answers I listed on the answer key examination.

Question 20.

Question and Answer Key Answer.

The MOST common issue involving lawsuits against psychiatrists is

A. **XX** Suicide
B. Improper use of restraints
C. Sexual involvement
D. Drug reactions
E. Violence

Challenges.

1. Text page 1494 states the most common recent allegations of malpractice are incorrect treatment followed by attempted completed suicide. Because incorrect treatment is not a choice, this question should be eliminated.
2. The correct answer should be D: Drug Reactions or B: Suicide. On Page 1494 of the textbook, a table in the upper left corner lists the recent allegations of malpractice and approximate frequency of claims, on this table, only two choices are listed, incorrect treatment/medication error drug damage for a total of 40% and completed/attempted suicide at 20%. No where is improper use of restraints mentioned. This is also supported by the class notes, page 820, slide 4 which lists common causes of liability and includes negligent prescription practices but does not mention restraints.

Dr. Engel Response. Correct answer is **A**. Looking at the answer sheet for this question, response B is listed. This is another typo I'm afraid. Of the choices listed, A is the most common and therefore is the single best response to the question (see table 41-1 on page 1494 of your book). Response choices not listed on the table occur so infrequently they would be considered as part of the "other" category.

Question 23.

Question and Answer Key Answer.

Which of the following tricyclic drugs is LEAST associated with anticholinergic effects?

A. Amitriptyline
B. Clomipramine
C. **XX** Desipramine
D. Imipramine
E. Trimipramine

Challenges.

1. I was unable to find references for questions 14, 23, 26, and 52 in the assigned

reading and would appreciate references to these questions at your convenience.

Dr. Engel Response. Correct answer is **C**. See page 1033 under "Anticholinergic Effects" and table 27-1 on page 1030. Page 1033 notes the tertiary amines are the most highly anticholinergic of the tricyclic antidepressants. Table 27-1 shows that A, B, D, and E are all tertiary amine tricyclic antidepressants while desipramine is a secondary amine tricyclic antidepressant.

Question 24.

Question and Answer Key Answer.

Which of the following statements are correct regarding psychiatric problems in the primary care setting?

A. 20% of primary care patients have anxiety or depressive disorders
B. **XX** 5 to 10% of primary care patients have a mood disorder
C. Alcohol use disorders affect less than 5% of primary care patients
D. Substance use disorders (not counting alcohol) affect less than 5% of primary care patients
E. All of the above are correct statements

Challenges.

1. Text page 480 states that the prevalence of all depressive disorders in primary care is 9%-20%. This question has no correct answer. The closest to being correct is A. 9-20% plus the small group of anxiety patients brings the total to approximately 15-25% and this the average of A is very good.

Dr. Engel Response. Correct answer is **A**. The single best answer is A rather than B. The book (page 1618) says, "Epidemiologic studies in primary care typically show that 10-15% of patients have anxiety or depressive disorders." It also says that 9-20% of patients have mood disorders. By these figures, 5-10% with a mood disorder is too low. Page 1619 notes that 5-15% of primary care patients have alcohol problems alone, and 5-7.1% have substance use disorders other than alcohol, so choices C, D, and E are incorrect.

Question 26.

Question and Answer Key Answer.

Which of the following statements about sympathomimetics is correct?

A. They are poorly absorbed from the gastrointestinal tract and therefore require high dosages to achieve a therapeutic effect.
B. The chemical structures of dextroamphetamine, methylphenidate, and pemoline are closely related.
C. Tolerance for the therapeutic effect in attention-deficit/hyperactivity disorder develops for dextroamphetamine and pemoline but not for methylphenidate, which is therefore the most frequently used agent for attention-deficit/hyperactivity disorder.
D. **XX** Use of sympathomimetics for treatment of depression is limited by concerns about abuse potential.

E. All sympathomimetics have exactly the same pharmacodynamic profile.

Challenges.
1. I was unable to find references for questions 14, 23, 26, and 52 in the assigned reading and would appreciate references to these questions at your convenience.

Dr. Engel Response. Correct answer is D, but **everyone will get credit for this question**. This is a question that has been asked in the past, but I can find no reference to it in the book or notes. As an aside, generally speaking, "psychostimulant" is the generally used term and the term the book uses rather than sympathomimetic.

Question 27.
Question and Answer Key Answer.
Which answer to the following statement is INCORRECT (false)? Research has shown that collaborative care (mental health professionals including psychiatrists join the primary care clinician in the primary care setting) for patients with depression…
A. Improves patient satisfaction with care
B. Improves patient compliance with antidepressant medication
C. Improves the cost-effectiveness of depression care
D. Improves depression symptoms in patients with major depression
E. **XX** Improves depression symptoms in patients with minor depression

Challenges.
1. We did not have access to this research and should not be tested.
2. Answer C should also be considered correct based on the textbook p. 1651. This page (bottom of the first full paragraph) states that "there was no evidence that this improvement in the quality of care [with collaboration between primary care docs and psychiatrists]...was accompanied by an overall offset of cost."
3. Answer C is also a correct answer. RE: p1651 in the red book, when discussing collaborative treatment models states: "...there was no evidence that this improvement in the quality of care was offset by a reduction in the number of primary care visits or was accomplished by an overall offset of cost."
   THEREFORE, answer C - "improves the cost-effectiveness of depression care" - is false. It should be an accepted answer.
4. * ref p. 1626
   Directly from the book, "Few studies have compared the*cost of psychiatric consultation*Wells and coworkers examined psychiatric consultation in primary care settings from the perspective of administrative motives in managed care systems. They described a 'for profit' system and a 'for quality' system approach to psychiatric consultation and mental health services. The 'for quality' system*[is] closest to that created in the collaborative care model*Not surprisingly, the 'for profit' system provides impressive short-term cost savings*"
   This is evidence that answer C, collaborative care "improves the cost-effectiveness of depression care," is false.

Dr. Engel Response. Correct answer is **E**. Page 1635 of the book says, "A collaborative care model, in which depression treatment guidelines are followed, was studied in a randomized controlled trial (Katon et al. 1995)…Compared with patients in the [usual

care] control group, patients in the intervention group exhibited greater compliance with medication therapy, rated the quality of care more highly, and were more likely to rate medications as helpful. In the case of patients with major depression – but not in the case of minor depression – outcome was better for those in the intervention group. Cost-effectiveness analysis revealed that the cost per successful outcome was $1,783 for the intervention group and $1,940 for the control group (Katon et al. 1997)."

Question 29.

Question and Answer Key Answer.

Which of the following statements about psychoactive medication use during pregnancy is FALSE?

A. Lithium use in the first trimester is associated with an increased risk of Ebstein's anomaly, a serious malformation of the tricuspid heart valve
B. Valproic acid use in the first trimester is associated with an increased risk of a neural tube defect
C. ECT is considered safe and effective for pregnant patients with severe mood disorders
D. **XX** Studies have not associated benzodiazepines with congenital anomalies
E. Agents used to treat extrapyramidal side effects of antipsychotic medications are associated with major and minor congenital anomalies

Challenges.

1. There should be no right answer for this question. According to the text on p. 1057, the affects of benzodiazepines during pregnancy "have not been proven with controlled studies."

Dr. Engel Response. Correct answer is **D**. Page 1434 expands on the statement described from page 1057. It says "…the use of benzodiazepines in pregnancy is controversial, with some researchers noting a significant risk of oral clefts, particularly with diazepam and alprazolam. Other studies, however, have not found this association." Therefore, some studies have associated benzodiazepines with congenital anomalies. The same page notes that ECT is considered safe and effective for pregnant patients with severe mood disorders. Page 1433 notes that valproic acid is associated with neural tube defects when used in the first trimester of pregnancy and lithium is associated with Ebstein's anomaly. Also noted on page 1433 is the association between agents used to treat extrapyramidal side effects of antipsychotics and major and minor congenital anomalies.

Question 32.

Question and Answer Key Answer.

The causes of delirium include

A. Antihistamines
B. Cerebral meningitis
C. Hypoglycemia
D. Urinary tract infection
E. **XX** All of the above

!! ANSWER KEY !!

Challenges.

1. Infectious etiologies of delirium include syphilis, encephalitis, and meningitis. UTI is not mentioned in our text as a cause of delerium. E is not a correct answer.

Dr. Engel Response. Correct answer is **E**. ANY infection can cause delirium, not just those directly involving CNS structures. The "I" in the WHHHHIMP mnemonic for possible emergent causes of delirium stands for "intracranial bleeding or infection" (page 325 table 10-5). The book states on the same page, "Signs of an infectious process, such as elevated white blood cell count or fever, must be sought. One must look especially for urinary tract infections in a confused elderly patient."

Question 42.

Question and Answer Key Answer.

Factors that predict a better response to carbamazepine than to lithium in bipolar I disorder include each of the following EXCEPT

A. Comorbid seizure disorder
B. Dysphoric mania
C. **XX** First episode of mania
D. Negative family history
E. Rapid cycling

Challenges.

1. Question 42 * ref p. 544
   "Treatment with lithium may be less effective than anticonvulsants in mixed (dysphoric) mania and rapid cycling; however, a direct comparison of carbamazepine and lithium in rapid-cycling bipolar disorder found both drugs to be equally effective."
   This is evidence that answer E is correct.

Dr. Engel Response. Correct answer is **C**. Page 544 of the book states, "Lithium, Carbamazepine, valproic acid and verapamil appear to be equally effective in the treatment of acute mania…" indicating that the first (or any other) episode of mania does not predict better response to carbamazepine than to lithium. The statement from page 544 noted in the challenge above is equivocal, though the section on rapid cycling on page 545 is fairly clear: "A recent consensus panel recommended valproate as the first choice for treating rapid cycling, followed by carbamazepine and then lithium." While the one study may not have found rapid cycling predicts a better response to carbamazepine than lithium, the consensus of experts considering the broader scope of scientific evidence conclude that rapid cycling predicts a better response to anticonvulsants than lithium.

Question 45.

Question and Answer Key Answer.

Which of the following is true?

A. The side effects of lithium are usually mild and transient.
B. Anticonvulsants cannot be used in combination with lithium.
C. Carbamazepine inhibits liver enzymes.

D. All of the above.
E. **XX** None of the above.

Challenges.

1. The correct answer should be A: The side effects of lithium are usually mild and transient. On Page 1082 of the textbook, after listing the mild side effects of lithium (nausea, diarrhea etc) the book clearly states that "these are often transient".
2. Answer A is correct. The *Concise Guide to Consultation Psychiatry* (by Rundell and Wise, third edition) states on p. 88 that “the side effects of lithium are usually mild, generally well tolerated, and often transient”.
3. Answer A is correct.
   RE: From “Concise guide to Consultation Psychiatry” (provided to us for the third year) p88. The first statement under adverse effects states: “In healthy individuals, the side effects of lithium are usually mild, generally well tolerated, and often transient”.
4. ANSWER should be A. The side effects of Lithium are usually mild and transient.
   Reference. Textbook of Psychiatry 3rd Edition page 1082, Clinical Uses. "Before they begin treatment with lithium, patients should be told that they might experience nausea, diarrhea, polyuria, increased thirst, and fine hand tremor. These are often transient, but in some patients they persist with therapeutic lithium levels."
   Common sense also dictates that if side effects of therapeutic levels of lithium were not usually mild and transient, the drug would not be used so often. I think the key word in this question is usually.

Dr. Engel Response. Correct answer is **A.** The challenges are clearly correct and the answer key is incorrect due to a typo. As an aside, since Dr. Rundell’s book is not a core text for the course and other students are not required to read it, I cannot use statements from that book to justify a response.

Question 46.

Question and Answer Key Answer.

Which of the following statements is TRUE?

A. **XX** Mortality in the hospitalized elderly patient with delirium is 25%.
B. The prevalence of delirium in the hospitalized elderly patient is 5%.
C. Older adults are more likely to be diagnosed with major depressive disorder than young adults.
D. The prevalence of Alzheimer’s disease among individuals over age 65 is 10-15%.
E. The prevalence of Alzheimer’s disease among individuals over 85 is 70-75%.

Challenges.

1. Question 46 * ref p. 1449
   "Alzheimer's disease, the most common disorder contributing to the dementia syndrome, has been estimated to be prevalent in 11% of community-based persons older than 65 years."
   Answer D is correct.
2. ANSWER should be D. The prevalence of Alzheimer's disease among individuals over age 65 is 10-15%.

!! ANSWER KEY !!

Reference. Textbook of Psychiatry 3rd Edition page 1449. "*Alzheimer's disease*, the most common disorder contributing to the dementia syndrome, has been estimated to be prevalent in 11% of community-based persons older than age 65 years."

3. Number 46: The correct answer should be D: According to the textbook Page 1449, "Alzheimer's disease, the most common disorder contributing to the dementia syndrome, has been estimated to be prevalent in 11% of community based persons older than age 65 years."
4. The answer on the answer key is A. ?? Mortality in the hospitalized elderly patient with delirium is 25%. This answer is wrong. Reference. Textbook of Psychiatry 3rd Edition page 328 "Furthermore, elderly patients who develop delirium in the hospital have a 22% to 76% chance of dying during hospitalization."
5. The exam key states, "A. Mortality in the hospitalized elderly patient with delirium is 25%" as the correct answer.

   I would like to challenge and state that "D. The prevalence of Alzheimer's disease among individuals over age 65 is 10-15%" is the correct answer.

   SUPPORT TO DISCOUNT EXAM KEY: p1448 (1st full paragraph, last 2 lines) from the course textbook states, "When delirium is diagnosed in an older patient who has been hospitalized, the hospitalization is usually prolonged, and both inhospital and posthospital mortality rates are increased. Mortality at 2-year follow-up nears 50%"

   SUPPORT FOR MY ANSWER: p1449 (2nd paragraph under "Memory Loss"; 8th line) from the course textbook states, "Alzheimer's disease, the most common disorder contributing to the dementia syndrome, has been estimated to be prevalent in 11% of community-based persons older than 65 years..."
6. The correct answer should be Answer Choices A and D. According to the textbook “Alzheimer’s disease, the most common disorder contributing to the dementia syndrome, has been estimated to be prevalent in 11% of persons older than 65 years. Since 11% is between 10% and 15%, this is a TRUE STATEMENT. Psychiatry Textbook p. 1449
7. According to the text on p. 1449, Alzheimer’s disease is “prevalent in 11% of community-based persons older than age 65 years.” This clearly makes answer choice D a correct response.
8. Although on page 317 of out text says "the presence of delirium signifies impending death in 25% of identified cases" this study does not specify if these cases were hospitalized or if this is indeed an accurate measure of mortality. Our text does talk about hospitalized patients and mortality on page 328 of our text. The only study on mortality that says 25% is using DSM III diagnosis AND the study is of only 77 patients. Later studies (1987, 94,97) have different numbers ranging from 65% mortality to no change in normal mortality percentages for hospitalized patients. Clearly A is not TRUE. It may have been suggested by some studies, but it is not true.
9. Answer D is a correct answer. This answer is another problem with statistics...but it lies within the legitimate realm of studies. (Although this next statement may not be legitimate for argument...this answer was provided as correct for past exams/study questions....and...there was never a reason to discount the answer) The numbers here are tough to sort out...most books provide age brackets with percentages...and unfortunately – no denominators. (It’s a statisticians nightmare!) BUT...10-15% is pretty much ballpark. Estimates of the current prevalence range from as low as 1.4 million to 4 million individuals (most of the pathology sources state the 4 million)...taking the 4 million...throwing on the denominator of roughly 30 million

(which is the US population over the age of 65)...and we have our number...right in the middle of the 10-15% range. Adding the give and take (which is always a necessity)...this is a correct answer. (Okay...I didn't search high and low for numbers...I used those from different classes...Preventive medicine...Stats...etc....but their all legit. And I'd hate if numbers from one class caused conflict with another...If I were to search hard, I'm sure I could find stats that fit perfectly...isn't that just the world of stats, though????)

10. The key states that answer "A" is correct. I feel "D" is also a correct response. Our text states on p. 1449 that the prevalence of Alzheimer's disease among individuals over age 65 is 11%, clearly between 10-15% as answer "D" states.

Dr. Engel Response. Correct answer is **A or D**. As noted, page 328 of the book says, "…elderly patients who develop delirium in the hospital have a 22% to 76% chance of dying during hospitalization." Elderly hospitalized patients are more severely ill than a representative sample of all delirious patients (e.g., some will be younger and some will present outside the inpatient setting, and the prognosis for these patients is going to be better in general than the older and hospitalized group) therefore the range will be biased on the high side. Just before the statement above, also on page 328, the book says, "Of 77 patients who received a DSM-III diagnosis of delirium from a consulting psychiatrist, 19 (25%) died within 6 months." Response D was written based on the statement on page 332 that reads, "The dementia syndrome affects 5-8% of individuals older than age 65, 15-20% of individuals older than age 75, and 25-50% of individuals older than age 85." However, I agree that the statement on page 1449 of the book states clearly that the prevalence of Alzheimer's disease among people over 65 is 11%. Therefore, I'll allow response D to stand as a correct response too.

Question 50.

Question and Answer Key Answer.

Which of the following antidepressants disrupts sleep continuity?

A. **XX** Fluoxetine
B. Nefazodone
C. Sertraline
D. Trazodone
E. None of the above

Challenges.

1. Page 1037 says SSRI's cause stimulation/insomnia that can disrupt the sleep cycle. Because sertraline is an SSRI, it should be a correct answer.

Dr. Engel Response. Correct answer is **A or C**. Since the book does not clearly differentiate between the different SSRIs with regard to their effects on sleep, I'll allow both SSRIs to stand as correct answers. For the record, of the SSRIs, fluoxetine is the most disruptive of sleep, sertraline the second most (much better tolerated than fluoxetine), and paroxetine (this drug is actually slightly sedating and does not typically disrupt sleep).

!! ANSWER KEY !!

Question 51.

Question and Answer Key Answer.

Takes as its focus the patient's current psychological conflicts and current dynamic patterns.

A. **XX** Psychoanalysis or psychoanalytic psychotherapy
B. Behavior therapy
C. Cognitive therapy
D. Cognitive-Behavioral therapy
E. None of the above

Challenges.

1. Perhaps I just need further clarification. I put "D" – cognitive-behavioral therapy. When the red book discusses psychodynamic therapies becoming more here and now...it likens them to cognitive-behavioral therapy. Furthermore, when discussing cognitive behavioral therapy, the book discusses how, since its origin, this approach considered the current thoughts and current resultant behaviors. This simply parallels current psych conflicts and current dynamic patterns.
2. Answer E should be the correct answer because the question defines something akin to psychodynamic therapy. When the text compares psychodynamic therapy to psychoanalytic therapy, it states (p. 1167, middle of the second column) that "to the extent that a psychodynamic psychotherapy focuses on the here-and-now experience of the patient rather than on the reconstruction of past experience " as in psychoanalytic therapy. In addition, the chapter on psychodynamic therapy has the theme that this type of therapy is different from other therapies in that, because it is shorter and more direct, it must focus on more current problems in the patient's life and less on historical problems.

Dr. Engel Response. Correct answer is **A**. Conflicts and dynamic patterns are not a part of cognitive, behavioral, or cognitive-behavioral therapies. Behavioral therapy involves an exclusive focus on behavior without any credence given to "mental mechanisms" behind that behavior. Cognitive therapy and cognitive-behavioral therapy focus on the patient's underlying cognitive schema, or system of beliefs, that drives patterns of behaviors. In cognitive and cognitive-behavioral therapy, one examines maladaptive beliefs, often doing empirical tests with the patient to confirm or reject different beliefs.

Brief psychodynamic therapies and psychoanalytic therapies are not mutually exclusive. In fact, essentially all of the brief dynamic therapies grew out of the psychoanalytic tradition, representing an attempt to adapt and apply psychoanalysis to the clinical and economic demands of routine practice. Hence, for this question you should interpret psychoanalytic psychotherapy as inclusive of brief psychodyamic therapy. Psychoanalytic psychotherapy is a sort of modified (or, as the text calls it, "applied") psychoanalysis. Pure psychoanalysis involves traditional Freudian methods such as the use of a couch, the therapist remaining out of the patient's direct view, a passive posture, and 3-4 visits weekly for a four-year period. Psychoanalysis involves use of the past to understand the present (or "here-and-now") transference. The therapist remains passive and out of view so that (as much as possible) the patient's opinions of the therapist are based upon transference (past experience generalized to the present relationship) rather than a reality-based knowledge of the therapist. Psychoanalytic psychotherapy attempts to develop the transference, generally speaking, but is less "pure" in its approach. The therapist is more active and gently steers the patient to important issues rather than allowing near uninterrupted "free associations" as

in pure psychoanalysis. The therapist sits face to face with the patient, and the patient is sitting up rather than on a couch. The purist would argue there is "too much" opportunity to contaminate the transference (the patient's opinions of the therapist based on projected fantasy) with a reality-based patient knowledge of the therapist (i.e., there is more opportunity for the therapist to show his or her personality to the patient and for the patient to get to know him or her on some rudimentary level).

Question 52.

Question and Answer Key Answer.

Age-related changes in the ratio of lean to fat body mass affect the distribution of all of the following EXCEPT

A. Imipramine
B. Diazepam
C. Chlorpromazine
D. **XX** Lithium
E. Fluoxetine

Challenges.

1. I was unable to find references for questions 14, 23, 26, and 52 in the assigned reading and would appreciate references to these questions at your convenience.

Dr. Engel Response. Correct answer is **D**. All one really needs to know here is that lithium is a monovalent cation (i.e., a salt) (see page 1082 of the book) and therefore is highly hydrophilic with essentially negligible distribution in fat.

Question 58.

Question and Answer Key Answer.

Which of the following drugs has the fastest onset of action against acute mania?

A. Carbamazepine
B. **XX** Haloperidol
C. Lithium
D. Risperidone
E. Valproate

Challenges.

1. * ref p. 1093

   "After the clinician diagnoses acute mania and decides to use valproate as the primary mood stabilizer, the initial dose depends on the urgency of the clinical situation. If the patient is highly agitated*use of the loading strategy may be indicated."

   The fact that the book uses valproate as the drug of choice for urgent acute mania implies that its onset is rapid. I was unable to find any reference that said haloperidol has the fastest onset of action against acute mania.

Dr. Engel Response. Correct answer is **B**. See page 544 of the book in the last paragraph of column one: "Rapid oral loading with divalproex may produce a more rapid

antimanic action [than oral administration]. Most of the time, however, the antimanic effect of this and other antimanic drugs is delayed. Until recently neuroleptics, particularly haloperidol, were used routinely to control agitation until the antimanic drug took effect…Once the patient's behavior is under better control, any neuroleptics that have been prescribed are withdrawn as an antimanic drug is gradually introduced." Additionally, see the middle of the second column on page 1093 of the text where it says, "Although the mood stabilizers provide definitive treatment, they often require 1-2 weeks, and occasionally longer, before their efficacy is apparent. Because agitation and behavioral dyscontrol are often prominent in mania, additional agents are frequently used in the acute setting. High-potency benzodiazepines are preferred to conventional antipsychotics because of the more benign side-effect profile…In general antipsychotic medication should be tapered after the acute episode, with continuation of the mood stabilizer as prophylaxis against recurrent episodes."

Question 59.

Question and Answer Key Answer.

Which of the following statements BEST describes the cognitive-behavioral notion of "automatic thoughts"

A. Preconscious thoughts that cause a maladaptive behavior
B. **XX** Thoughts resulting from a schema that result in an emotion or behavior
C. Repressed thoughts that drive emotions and behavior
D. Unconscious thoughts that come to the surface
E. B and D are correct

Challenges.

1. The correct answer should be E: B and D are correct. Both the book (Pge 1207) and the class notes state that we are often unaware of automatic thoughts but that they can be brought to the surface (called to our attention) by cognitive therapists.
2. The exam key states, "B. Thoughts resulting from a schema that result in an emotion or behavior" as the correct answer.

   I would like to challenge and state that, "E. B and D are correct" is the correct answer.

   Note, answer D states, "Unconscious thoughts that come to the surface."

   SUPPORT TO INCLUDE D AS PART OF ANSWER: p1207 (1st paragraph under "Levels of Dysfunctional Cognitions"; line 7) from the course textbook states, "These automatic thoughts usually are not subjected to rational analysis and often are based on erroneous logic. Although the individual may be only subliminally aware of these cognitions, automatic thoughts are accessible through questioning techniques used in cognitive therapy."

   Note: Since the questions informs the test-taker to include, "...the cognitive-behavioral notion of 'automatic thoughts'...", in reasoning the BEST answer, I feel you must include, based on the text, the answer that automatic thoughts are accessible through questioning techniques used in cognitive therapy.
3. The key states that "B" is the correct answer, but I feel "D" is also correct, thus making "E" (both B and D are correct) the best choice. I agree "B" is supported by our text. However, in our text on pg. 1207, it states that automatic thoughts are ones that the individual may only be subliminally aware of and only accessible through questioning techniques used in cognitive therapy. These statements support answer

D (unconscious thoughts that come to the surface).

Dr. Engel Response. Correct answer is **B**. The notion of unconscious, preconscious, and conscious processes is a psychoanalytic notion, not a cognitive-behavioral one. A cognitive-behavioral therapist would argue that there are no special places like a preconscious in the psyche that automatic thoughts reside in. Instead, they would say, automatic thoughts are a response to a completely accessible (the psychoanalyst would say "conscious") belief system or schema. The cognitive-behavioral therapist would say that because mental connections occur so fast (thus the reference to 'subliminal' from the book) when automatic thoughts happen, they seem inaccessible and tucked away in some special semiconscious place – but they are not. The cognitive-behavioral therapist helps the patient recognize these automatic thoughts by identifying the beliefs that trigger them.

Question 65.

Question and Answer Key Answer.

Of the following, which is the LEAST common cause of malpractice claims against psychiatrists by patients?

A. Suicide attempts
B. Improper use of restraints
C. Failure to treat psychosis
D. **XX** Sexual involvement
E. Substance dependence

Challenges.

1. Page 1494 says the percentage of malpractice claims from 1996. Improper use of restraints, failure to treat psychosis, and substance abuse were not listed and thus were under the category of other (each category in "other" was filed less than 2% of the time) Thus all three of these should be considered least common. Suicide was filed 20% and undue familiarity (sexual involvment?) was 3%. B,C and E should all be considered correct.

Dr. Engel Response. Correct answer is D but I'll allow **A, B, C, D, or E**. I'll give everyone credit for this question, since the choices from the table in the book and the lecture differ significantly from those used in the question.

Question 68.

Question and Answer Key Answer.

Separation anxiety disorder

A. Is a developmental phase
B. **XX** Accounts for most of the anxiety in childhood
C. Has its most common onset at 1 to 2 years of age
D. Is less serious when it occurs in adolescence
E. Always involves refusal to go to school

Challenges.

!! ANSWER KEY !!

1. Separation anxiety disorder has a prevalence of only .6-6%. Thus B cannot be correct because it is not even present in most people. It cannot account for most of the anxiety of childhood.
2. No correct answer. I'm still trying to figure this one out. Separation anxiety disorder has a prevalence of .6-6%. (and...since DSM-IV states onset before 18...this percentage is not necessarily only encompassing children...it may be overstated for that age group) (It is also comorbid with another disorder in 92+% of these cases.) (p926 – red book) Not going any further, this means that 94-99.4% of individuals do not have this disorder. In most individuals, separation anxiety disorder does not account for ANY anxiety...so to say that it accounts for most of the anxiety in childhood is incorrect...(separation anxiety may account for most of this anxiety...but not the disorder.).

Dr. Engel Response. Correct answer is **A or B or C or D or E**. The most common "cause" of anxiety in childhood is normal childhood anxiety (i.e., anxiety that is situational and/or developmental without any associated psychiatric disorder). Perhaps option B should have read "is the most common anxiety disorder in childhood." That was what I was trying to get at with this question. I'll give everyone credit for this question.

Question 71.

Question and Answer Key Answer.

A computed tomography (CT) scan or magnetic resonance imaging (MRI) is indicated for which of the following indications?

A. Impaired cognition.
B. Suspected brain tumor.
C. First episode of psychosis.
D. **XX** All of the above
E. None of the above.

Challenges.

1. The correct answer is not D: All of the above. In SEVERAL previous exam questions and according to the table on Page 1450 of the textbook, standard tests for impaired memory, CT/MRI is not indicated.

Dr. Engel Response. Correct answer is **D**. The table on page 1450 of the book lists CT/MRI as an "elective" indication for memory loss. Table 9-6 on page 289 lists impaired cognition as a "possible" indication for CT/MRI. Table 10-8 on page 328 of your book lists CT as indicated as part of the neuropsychiatric evaluation for delirium (usually suspected on the basis of cognitive changes) "based on clinical judgment." The discussion regarding the diagnosis of dementia on page 339 says, "With no laboratory tests yet available for DAT, diagnosis is often aided by the use of neuroimaging techniques." These references suggest that memory loss is a relative indication for impaired cognition. Since B and C are also correct, then the best answer is D. I'd have to hear about specific past questions to assess the assertion that this answer is inconsistent with the answers to prior test questions. Let me say again, however, that the blind use of prior test questions to gage the answer for future test questions is a risky learning strategy and not recommended.